

TITLE V APPLICATION REVIEW

VP BUILDINGS, INC.

Date of Application:	10/9/96	Engineer:	Beverly Boucher
Deemed Complete:	12/5/96	Facility #:	N-2274
Date:	11/10/97	Project #:	960573

Facility Name: VP Buildings, Inc.
Mailing Address: 530 South Tegner Road
Turlock, CA 95380

Contact Person: Steven Wareing, Manufacturing Engineer
Phone: (209) 667-4951, ext. 271

Responsible Official: William Reynolds
Title: Vice President, Manufacturing

I. PROPOSAL

VP Buildings, Inc. is proposing that an initial Operating Permit be issued for its existing metal parts and products coating operation located in Turlock, CA. The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and to provide the legal and factual basis for proposed permit conditions.

II. FACILITY LOCATION

The VP Buildings, Inc. is located at 530 S. Tegner Road in Turlock, California.

III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at this facility is shown in Attachment A.

A summary of exempt equipment categories which describes the insignificant activities or equipment at the facility not requiring a permit is shown in Attachment B. This equipment is not exempt from facility-wide requirements.

This facility consists of four currently permitted units: two spray-coating operations and two dip-coating operations. Current Authorities to Construct and Permits to Operate are included as Attachment C.

IV. GENERAL PERMIT TEMPLATE USAGE

The applicant has chosen not to use any model general permit templates.

V. SCOPE AND EPA PUBLIC REVIEW

The applicant has not requested to utilize any model general permit templates. Therefore, the proposed permit in its entirety is subject to EPA and public review.

VI. APPLICABLE REQUIREMENTS ADDRESSED BY GENERAL PERMIT TEMPLATES

Since the applicant has not utilized any model general permit templates, there are no requirements addressed by general permit templates. All applicable requirements are explicitly addressed in the permit outside of the general permit templates.

VII. APPLICABLE REQUIREMENTS NOT ADDRESSED BY GENERAL PERMIT TEMPLATES

District New and Modified Stationary Source Review Rule (NSR)

District Rule 1100 Equipment Breakdown (as amended December 17, 1992)

District Rule 1160 Emission Statements (as adopted November 18, 1992)

District Rule 2010 Permits Required (as amended December 17, 1992)

District Rule 2020 Exemptions (as amended July 21, 1994)

District Rule 2031 Transfer of Permits (as amended December 17, 1992)

District Rule 2040 Applications (as amended December 17, 1992)

District Rule 2070 Standards for Granting Applications (as amended December 17, 1992)

District Rule 2080 Conditional Approval (as amended December 17, 1992)

District Rule 2520 Federally Mandated Operating Permits (adopted June 15, 1995)

District Rule 4101 Visible Emissions (as amended December 17, 1992)

District Rule 4201, Particulate Matter Concentration (as amended December 17, 1992)

District Rule 4601 Architectural Coatings (as amended December 17, 1992)

District Rule 4603 Surface Coating of Metal Parts and Products (as amended May 20, 1993)

District Rule 4661 Organic Solvents (as amended December 17, 1992)

District Rule 8020 Fugitive Dust Requirements for Control of Fine Particulate Matter (PM-10) from Construction, Demolition, Excavation, and Extraction Activities (as amended April 25, 1996)

District Rule 8030 Fugitive Dust Requirements for Control of Fine Particulate Matter (PM-10) from Handling and Storage of Bulk Materials (as amended April 25, 1996)

District Rule 8060 Fugitive Dust Requirements for Control of Fine Particulate Matter (PM-10) from Paved and Unpaved Roads (as amended April 25, 1996)

40 CFR Part 61 Subpart M National Emission Standard for Asbestos

40 CFR Part 68, Chemical Accident Prevention Provisions

40 CFR Part 82 Subpart F Stratospheric Ozone

VIII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V permit are designated as Federally Enforceable Through Title V Permit.

For this facility, the following requirement is not Federally Enforceable through Title V:

Condition 1 of the requirements for permit units N-2274-1-2, N-2247-2-1, N-2274-3-1 and N-2274-4-1

IX. COMPLIANCE

A. Requirements Addressed by Model General Permit Templates

The applicant has not chosen to utilize any District model general permit templates. Therefore, every applicable requirement is explicitly addressed outside of the general permit templates.

B. Requirements Not Addressed by Model General Permit Templates

1. District Rule 1100

a. Entire Facility

Sections 6.0 and 7.0 set forth breakdown procedures and reporting requirements. These requirements are addressed by conditions 1, 2 and 11 of the facility wide requirements (N-2274-0-1). District Rule 1100 has been submitted to the EPA to replace the Stanislaus County Rule 110 in the SIP. District Rule 1100 is at least as stringent as the county SIP rule addressing breakdowns as demonstrated in Table 1, Comparison of District Rule 1100 to SCAPCD Rule 110.

Table 1 - Comparison of District Rule 1100 to SCAPCD Rule 110

REQUIREMENTS	District Rule 1100	Stanislaus County APCD Rule 110
A breakdown occurrence must be reported as soon as reasonably possible but no later than 1 hour after detection.	X	X
A variance must be obtained if the occurrence will last longer than a production run or 24 hours, whichever is shorter (96 hours for CEM systems).	X	X
A report must be submitted to the APCO within 10 days of the correction of the breakdown occurrence which includes:	X	X
1) A statement that the breakdown condition has been corrected, together with the date of correction and proof of compliance.	X	X
2) A specific statement of the reason(s) or cause(s) for the occurrence sufficient to enable the APCO to determine whether the occurrence was a breakdown condition.	X	X
3) A description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future.	X	
4) Pictures of the equipment or controls which failed if available.	X	

2. District Rule 1160

a. Entire Facility

Section 5.0 requires the owner or operator of any stationary source to provide the District with a written emission statement showing actual emissions of reactive organic gases (ROGs) and nitrogen oxides (NOx) from that source. The District waives this requirement for sources emitting less than 25 tons per year of these pollutants if the District provides the Air Resources Board (ARB) with an emission inventory of sources emitting greater than 10 tons per year of NOx or ROGs based on the use of emission factors acceptable to the ARB. See condition 3 of the facility wide requirements (N-2274-0-1).

3. District Rule 2010 and 2020

a. Entire Facility

District Rule 2010 sections 3.0 and 4.0 require any person building, modifying or replacing any operation that may cause the issuance of air contaminants to apply for an Authority to Construct (ATC) from the District in advance. The ATC will remain in effect until the Permit to Operate (PTO) is granted. District Rule 2020 lists equipment which are specifically exempt from obtaining permits and specifies record keeping requirements to verify such exemptions. These requirements are stated in condition 4 of the facility wide requirements (N-2274-0-1). District Rule 2010 and 2020 have been submitted to the EPA to replace Stanislaus County APCD Rules 201 and 202, respectively. The comparison of District and County rules are presented in Table 2, Comparison of District Rule 2020 to SCAPCD Rule 202. and Table 3, Comparison of District Rule 2010 to SCAPCD Rule 201

Table 2 - Comparison of District Rule 2020 to SCAPCD Rule 202

REQUIREMENTS	District Rule 2020	Stanislaus County APCD Rule 202
An ATC or PTO is not required for listed exempt equipment.	X	X
Conditions are stated under which listed exempt equipment will require an ATC or PTO.	X	

Record keeping is required to verify and maintain exemption, when the exemption is based on a maximum daily limitation.	X	
A compliance schedule is stated for equipment which loses exemption from permitting, necessitating submission of a PTO application.	X	

Table 3 - Comparison of District Rule 2010 to SCAPCD Rule 201

REQUIREMENTS	District Rule 2010	Stanislaus County APCD Rule 201
An ATC is required for the building, alteration, or replacement of a source of air contaminants.	X	X
A PTO is required before a new or modified source or an existing source is operated.	X	X
Before operating new equipment, notification must be given to the District. The ATC will serve as a temporary PTO until the PTO is granted/denied.	X	X
The ATC granted to modify a source will serve as a temporary PTO until the PTO is granted/denied.	X	X
An application for a PTO for existing equipment will serve as a temporary PTO. If the source had a previous PTO, it must not be operated under the temporary PTO contrary to the conditions of the previous PTO.	X	X
The PTO must be affixed on the source operation or must be maintained available at all times on the operating premises.	X	X
A PTO must not be defaced, altered, forged, counterfeited or falsified.	X	X

4. District Rule 2031, 2070 and 2080

a. Entire Facility

These rules set forth requirements to comply with all conditions of the Permit to Operate. Permits to Operate or Authorities to Construct are not transferable unless a new application is filed with and approved by the District. All source operations must be constructed and operated as specified in the Authority to Construct. See conditions 5 and 6 of the facility wide requirements (N-2274-0-1) . District Rule 2031 has been submitted to the EPA to replace Stanislaus County APCD Rule 203. District Rules 2070 and 2080 have been submitted to replace Stanislaus County APCD Rules 208 and 209, respectively. A comparison of the District and County rules are presented in Table 4, Comparison of District Rule 2031 to SCAPCD Rule 203, Table 5, Comparison of District Rule 2070 to SCAPCD Rule 208 and Table 6, Comparison of District Rule 2080 to SCAPCD Rule 209.

Table 4 - Comparison of District Rule 2031 to SCAPCD Rule 203

Requirements	District Rule 2031	Stanislaus County APCD Rule 203
A permit will not be transferable from one location to another.	X	X
A permit will not be transferable from one piece of equipment to another.	X	X
A permit will not be transferable from one person to another.	X	X

Table 5 - Comparison of District Rule 2070 to SCAPCD Rule 208

Requirements	District Rule 2070	Stanislaus County APCD Rule 208
An ATC or PTO will be denied if the source emits air contaminants in violation of applicable sections of the Health and Safety Code.	X	X
An ATC or PTO will be denied if the source does not comply with requirements of the <u>New and Modified Source Review Rule</u> .	X	
An ATC or PTO will be denied if the source does not comply with provisions of rules stating <u>New Source Performance Standards</u> or <u>National Emissions Standards for Hazardous Air Pollutants</u> .	X	
A PTO will be denied if the source has not been constructed in accordance with the ATC.	X	X
A source may not be operated contrary to the conditions of the PTO.	X	
Before a permit is granted, the applicant may be required to provide and maintain facilities for sampling and testing of air contaminants discharged.		X

Table 6 - Comparison of District Rule 2080 to SCAPCD Rule 209

Requirements	District Rule 2080	Stanislaus County APCD Rule 209
An ATC or PTO may be issued subject to conditions specified in writing to insure compliance with standards of the rule <u>Standards for Granting Applications</u> .	X	X
An ATC or PTO with revised conditions will be issued upon receipt of a new application, if it is demonstrated that the source will operate within the standards of the rule <u>Standards for Granting Applications</u> , under the revised conditions.	X	X

5. District Rule 2040

a. Entire Facility

Section 3.0 requires that every application for a permit shall be filed in a manner and form prescribed by the District. See condition 7 of the facility wide requirements (N-2274-0-1). District Rule 2040 has been submitted to the EPA to replace Stanislaus County APCD Rule 204. The District rule is at least as stringent as the County rule, as shown in the Table 7, Comparison of District Rule 2040 to SCAPCD Rule 204.

Table 7 - Comparison of District Rule 2040 to SCAPCD Rule 204

Requirements	District Rule 2040	Stanislaus County APCD Rule 204
Every application must be filed in a manner and form prescribed and must give all information necessary to enable a determination to be made as required by the rule <u>Standards for Granting Applications</u> .	X	X
Further information or plans or specifications may be required before an application for a permit is acted upon.	X	
Written notification of the reason(s) will be given in the event an application is denied. No further application will be accepted until the applicant has complied with the reasons specified for application denial.	X	
An application may be deemed denied if not acted upon within 60 days after filing.	X	
Within 10 days of receipt of notification of application denial, an applicant may petition the Hearing Board for a public hearing. A public notice will be given 10 days before a public hearing and the public hearing will be held 30 days after the petition is filed.	X	

6. District Rule 2520

a. Entire Facility

Section 5.2 requires that permittees submit applications for Title V permit renewal at least six months prior to permit expiration. Condition 36 of the facility wide requirements (N-2274-0-1) assures compliance with this requirement.

Section 9.0 of District Rule 2520 requires certain elements to be contained in each Title V permit:

Sections 9.5.1 and 9.5.2 contains requirements to incorporate all applicable record keeping requirements into the Title V permit, specific records of any required monitoring, and the retention of all required monitoring data and support information for five years. The requirements to keep specific monitoring records and retain records for five years are stated in conditions 8 and 9 of the facility wide requirements (N-2274-0-1), respectively.

Section 9.6 contains requirements for the submittal of reports of monitoring at least every six months and prompt reporting of deviations from permitting requirements, including those attributable to upset conditions. All required reports must be certified by the responsible official. These requirements are stated in conditions 10 and 11 of the facility wide requirements (N-2274-0-1) .

Section 9.8 states that the Title V permit must also contain a severability clause in case of a court challenge; the severability clause is stated in condition 12 of the facility wide requirements (N-2274-0-1).

Section 9.9 contains requirements for provisions in the Title V permit stating that 1) the permittee must comply with all permit conditions; 2) that the permitted activity would have to be reduced to comply with the permit conditions should not be a defense in an enforcement action, 3) that the permit may be revoked, modified, reissued, or reopened for cause, 4) that the Title V permit does not reflect any property rights, and 5) that the permittee will furnish the District with any requested information to determine compliance with the conditions of the Title V permit. Compliance with these sections of Rule 2520 will be assured by conditions 5 and 13 through 16 of the facility wide requirements (N-2274-0-1).

Section 9.10 contains the requirement to provide in the permit that the permittee pay annual permit fees and applicable fees from District Rules 3010, 3030, 3050, 3080, 3090, 3110, and 3120. This requirement is stated in condition 17 of the facility wide requirements (N-2274-0-1).

Section 9.14.1 requires any report or document submitted under a permit requirement or a request for information by the District or EPA shall contain a certification by a responsible official to truth, accuracy, and completeness. Compliance with this section will be assured by condition 28 of the facility wide requirements (N-2274-0-1).

Section 9.14.2 contains inspection and entry requirements that allow an authorized representative of the District to enter a permittee's premises to inspect equipment, operations, work practices, permits on file, and to sample substances or monitor parameters for the purpose of assuring compliance with the permit requirements. Compliance with this section will be assured by conditions 18, 19, 20 and 21 of the facility wide requirements (N-2274-0-1).

Section 9.17 requires that the permittee submit certification of compliance with the terms and standards of Title V permits to the EPA and the District annually (or more frequently as required by the applicable requirement or the District). Condition 35 of the facility wide requirements (N-2274-0-1) assures compliance with this requirement.

Section 10.0 Requires any application form, report or compliance certification submitted pursuant to these regulations shall contain certification of truth accuracy, and completeness by a responsible official. Compliance with this section will be assured by condition 28 of the facility wide requirements (N-2274-0-1).

7. District Rule 4101

a. Entire Facility

District Rule 4101 has been submitted to the EPA to replace Rule 401 (all counties of the SJVUAPCD). EPA made a preliminary determination that District Rule 4101 is "more stringent" than the county versions previously referenced, per correspondence date August 20, 1996.

Section 5.0 prohibits the discharge of any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart; or is of such opacity as to obscure an

observer's view to a degree equal to or greater than 20% opacity. This requirement is stated in condition 22 of the facility-wide requirements (N-2274-0-1).

8. District Rule 4601

a. Entire Facility

This rule limits the emissions of VOCs from architectural coatings. It requires limiting the application of coating to no more than 250 grams of VOC/liter of coating (less water and exempt compounds). It also forbids the use of coating from the list in the Table of Standards (section 5.2) and limits the use of Specialty Coatings to a VOC content not to exceed the specified limits in Table 1 of Rule 4601. This rule further specifies labeling requirements, coatings thinning recommendations, storage requirements and cleanup requirements. See conditions 23, 24, 25, 26 and 27 of the facility wide requirements (N-2274-0-1).

9. District Rule 4002 - National Emissions Standard for Asbestos - 40 CFR Part 61.145, 61.150

a. Entire Facility

There are applicable requirements from the National Emissions Standards for Hazardous Air Pollutants that apply to all sources in general. These requirements pertain to asbestos removal and disposal from renovated or demolished structures. Compliance is assured for these requirements by condition 34 of the facility wide requirements (N-2274-0-1).

10. 40 CFR Part 68 - Chemical Accident Prevention Provisions

Requirements from this regulation are applicable to facilities which may store regulated substances above a threshold limit, as specified in the regulation. VP Buildings, Inc. may store such substances and could become subject to these requirements. To preclude a permit reopening if the source becomes subject to 40 CFR Part 68, compliance with these regulations will be required by condition 38 of the facility-wide requirements (N-2274-0-1).

11. Title VI of the CAA - Stratospheric Ozone

a. Entire Facility

There are applicable requirements from Title VI of the CAA (Stratospheric Ozone) that apply to all sources in general. These requirements pertain to air conditioners, chillers and refrigerators located at a Title V source and to disposal of air conditioners or maintenance/recharging/disposal of motor vehicle air conditioners (MVAC). These requirements are addressed in conditions 29 and 30 of the facility wide requirements (N-2274-0-1).

12. SJVUAPCD Regulation VIII - Fugitive Dust (PM10)

a. Entire Facility

These regulations contain requirements for the control of fugitive dust. These requirements apply to various sources: construction, demolition, excavation, extraction, and water mining activities; outdoor storage piles; paved and unpaved roads. Compliance with these regulations will be required by conditions 31, 32 and 33 of the facility wide requirements (N-2274-0-1).

13. New and Modified Stationary Source Review Rule (NSR)

a. Beams Coating Operation

Permit unit N-2274-1-1 was subject to the NSR Rule at the time the applicant applied for Authority to Construct (ATC) this unit. ATC N-2274-1-1 was issued by SJVUAPCD on August 23, 1996.

- Condition 1 of the ATC has been incorporated into the requirements of permit unit N-2274-1-2 as permit condition 1. This condition is not federally enforceable because it is based on the public nuisance requirements of the California Health and Safety Code rather than a federally applicable requirement.
- Conditions 2 and 3 of the ATC require that the coating operation and records comply with District Rule 4603 by reference. The applicable requirements of District Rule 4603 are specifically addressed within this document. Therefore, conditions 2 and 3 of the ATC have not been incorporated into the requirements of permit unit N-2274-1-2.
- As a part of this evaluation, the statement of condition 4 of the ATC has been administratively amended to explicitly state the applicable requirements of District Rule 4603, section 6.2. The record keeping requirement of the volume of coating/solvent mix ratio and VOC content of solvents used for surface preparation and clean up have been incorporated. The change in wording does not affect the requirement and is not a modification to the permit as defined in the NSR Rule. This condition has been incorporated into the requirements of permit unit N-2274-1-2 as condition 10.
- Condition 5 of the ATC has not been included in the requirements for this permit unit. Condition 5 of the ATC requires that records be retained for at least 2 years. This condition is redundant to condition 9 of the facility wide requirements (N-2274-0-1) which requires the retention of records for at least 5 years.
- Condition 6 of the ATC has been incorporated into the requirements of permit unit N-2274-1-2 as condition 7.
- Conditions 7 and 8 of the ATC have been incorporated into the requirements of permit unit N-2274-1-2 as conditions 5 and 6, respectively.
- Conditions 9 and 10 the ATC have been included in the requirements of permit unit N-2274-1-2 as permit conditions 12 and 15, respectively.

b. Vac-U-Paint Coating Operation

Permit unit N-2274-2-0 was subject to the NSR Rule at the time the applicant applied for Authority to Construct (ATC) this unit. ATC 6-009-05 for unit N-2274-2-0, was issued by Stanislaus County APCD on August 21, 1991.

- Condition 1 of the ATC is included as condition in the requirements of permit unit N-2274-2-1. Condition 1 and 2 of the ATC establish a VOC content limit (240 g/l), a coating usage limit (66.5 gal/day), and. These are redundant to condition 5 of the ATC which establishes a daily emission limitation.
- Condition 2 of the ATC was considered obsolete and has not been included in the requirements of permit unit N-2274-2-1. Condition 2 of the ATC establishes a VOC content limit a coating usage limit (66.5 gal/day), and limits equipment operation to 16 hours/day. These are extraneous to the permit since compliance with the NSR DEL is assured by recordkeeping requirements of the PTO (condition 4).
- Condition 3 of the ATC has been reworded to reflect the specific requirements of District Rule 4603, section 6.2. The additional requirement includes the record keeping of VOC content of coating and solvents and total quantity of VOC emitted in pounds. This change in wording does not affect the requirement and is not a modification to the permit as defined in the NSR Rule. This condition has been incorporated into the requirements of permit unit N-2274-2-1 as condition 8.

- Condition 4 of the ATC has not been included as a requirement for this permit unit. This condition requires written approval from the District prior to substitution of other paints. The VOC content and recordkeeping requirements of District Rule 4603 provide appropriate limitations on coating selection so that this condition is now extraneous.
- Condition 5 of the ATC contains a DEL that has been included in condition 10 of the requirements for permit unit N-2274-2-1. The term “ROG” has been changed to “VOC” in the DEL, since these terms were used interchangeably by the Stanislaus county engineers and subsequent PTOs for the unit use the term “VOC”. This change in wording does not affect the requirement and is not a modification to the permit as defined in the NSR Rule. Condition 5 of the ATC also contains a statement that the equipment be “operated and maintained in a manner which complies with all applicable rules.” This part of condition 5 of the ATC has not been included as a requirement for this permit unit since all of the imposed conditions will ensure such operation.

c. Dip Tanks

ATC 6-009 was issued to authorize the construction of both permit units N-2274-3-0 and N-2274-4-0 by the Stanislaus County APCD on November 17, 1987. The evaluation states there was no increase in VOC emissions and that county Rule 209.1, New Source Review, was not applicable to this modification.

14. District Rule 2520, 9.4.2

Section 9.4.2 requires that periodic monitoring be performed if none is associated with a given emission limit to assure compliance. This section allows that recordkeeping requirements may be sufficient to meet these requirements.

a. Beams Coating Operation, Permit Unit N-2274-1-1

Compliance with opacity, PM, and VOC emission limits will be demonstrated by monitoring and recordkeeping, as required by conditions 13, 14 and 15 of the requirements for permit unit N-2274-1-2. Condition 10 of the requirements for permit unit N-2274-1-2 requires record entries be initialled by the person making the entry for ease of tracking/checking entry information.

b. Vac-U-Paint Coating Operation, Permit Unit N-2274-2-0

Compliance with opacity and PM emission limits will be demonstrated by monitoring and recordkeeping, as required by conditions 11 and 12 of the requirements for permit unit N-2274-2-1. Condition 8 of the requirements for permit unit N-2274-2-1 requires record entries be initialled by the person making the entry for ease of tracking/checking entry information.

c. Dip Tanks

Condition 8 of the requirements for permit units N-2274-3-1 and -4-1 requires record entries be initialled by the person making the entry for ease of tracking/checking entry information.

15. District Rule 4201

EPA issued a relative stringency finding, dated August 20, 1996, stating District Rule 4201 is more stringent than SIP approved Fresno County Rule 404.

Rule 4201 limits particulate matter emissions from any single source operation to 0.1 grains per cubic foot of gas at dry standard conditions.

a. Beams Coating Operation, permit unit N-2274-1-2

The following calculations demonstrate that the emission of PM for this unit complies with the limit of this rule.

$$\frac{(110 \text{ gal} / \text{hr})(5.5 \text{ lb PM} / \text{gal})(1 - 0.75)(1 - 0.66)(7000 \text{ gr} / \text{lb})}{4,950,000 \cdot \text{dscf} / \text{hr}} = 0.07 \frac{\text{grains}}{\text{dscf}}$$

$$< 0.1 \frac{\text{grains}}{\text{dscf}}$$

where:

110 gal/hr = paint usage, worst case: engineering evaluation for this unit, Project #960071 dated 8/21/96, states maximum coating usage is 110 gallons/day. Here it is assumed at worst case, all coating is applied in one hour

5.5 lb PM/gal = solids content (PM) from Project #960071 dated 8/21/96

4,950,000 dscf/hr = exhaust airflow rate, based on spray building equipped with 3 exhaust fans, each rated at 27,500 CFM, per applicant

0.75 = HVLP gun transfer efficiency, STAPPA/ALAPCO "Air Quality Permits", Volume II.

0.66 = dry filter PM10 removal efficiency for paint-spray booth, STAPPA/ALAPCO "Air Quality Permits", Volume II.

The above equation demonstrates that the emissions of PM are expected to be well below the applicable limits at worst case conditions. Thus no additional testing or monitoring for PM will be required for this unit. Conditions 13, 14, and 16 of the requirements for permit unit N-2274-1-2 assure compliance with District Rule 4201.

b. Vac-U-Paint Coating Operation, permit unit N-2274-2-1

The following calculations demonstrate that the emission of PM for this unit complies with the limit of this rule.

$$\frac{(4.2 \text{ gal/hr})(10.07 \text{ lb/gal})(0.457)(1 - 0.30)(1 - 0.95)(7000 \text{ gr/lb})}{(1,200 \cdot \text{dscfm}) \cdot (60 \text{ min/hr})} = 0.066 \frac{\text{grains}}{\text{dscf}}$$

$$< 0.1 \frac{\text{grains}}{\text{dscf}}$$

where:

4.2 gal/hr = paint application rate from engineering evaluation for this unit, dated 8/22/91. Typical coating usage is approximately 2.5 gal/hr, per applicant.

10.07 lb/gal = coating density from MSDS

0.457 = solids content by weight from MSDS

1,200 dscf/min = exhaust airflow rate, from engineering evaluation for this unit, dated 8/22/91

0.30 = Air Atomization transfer efficiency, STAPPA/ALAPCO "Air Quality Permits", Volume II.

0.95 = filter PM removal efficiency, conservative for equipment design, see Attachment G.

The above equation demonstrates that the emissions of PM are expected to be well below the applicable limits at worst case conditions. Thus no additional testing or monitoring for PM will be required for this unit. Conditions 11, 12, 13 of the requirements for permit unit N-2274-2-1 assure compliance with District Rule 4201. This equipment is operated on a part time basis, which typically does not exceed one to two times/week. Monthly inspection of the equipment to assure proper operation is required by condition 11 of the requirements for permit unit N-2274-2-1.

c. Dip Tanks, permit units N-2274-3-1 and -4-1

Coating is applied by dipping the metal part into a tank containing the coating. The part is then elevated and allowed to drip-dry. No PM aerosol is created by this coating method and therefore District Rule 4201 is not applicable to these units.

16. District Rule 4603

a. Beam Painting, Continuous Coater, Dip Tank and Gage Dip Tank

Section 5.1 prohibits the application of coating with a VOC content in excess of specified limits. Condition 2 of the requirements for permit units N-2274-1-2, N-2274-2-1¹, N-2274-3-1 and N-2274-4-1 assures compliance with this prohibition.

Section 5.2 prohibits the application of specialty coating with a VOC content in excess of specified limits. Condition 3 of the requirements for permit units N-2274-1-2, N-2274-3-1

¹ Note condition 2 of the requirements for permit unit N-2274-2-1 is the more stringent NSR VOC coating content limit, which assures compliance with this section of District Rule 4603

and N-2274-4-1 and condition 2 for permit unit N-2274-2-1 assures compliance with this prohibition.

Section 5.4.1 requires that solvent containing no more than 200 grams of VOC per liter of material be used. Condition 4 of the requirements for permit units N-2274-1-2, N-2274-3-1 and N-2274-4-1 and condition 3 for permit unit N-2274-2-1 assures compliance with this requirement.

Section 5.4.2 requires that all solvent laden cloth or paper be stored in closed, non absorbent container. Condition 5 of the requirements for permit units N-2274-1-2, N-2274-3-1 and N-2274-4-1 and condition 4 for permit unit N-2274-2-1 assures compliance with this requirement.

Section 5.4.3 requires that all coatings and solvents be stored in closed containers. Condition 6 of the requirements for permit units N-2274-1-2, N-2274-3-1 and N-2274-4-1 and condition 5 for permit unit N-2274-2-1 assures compliance with this requirement.

Section 5.4.4 requires the use of VOC containing material for spray equipment cleanup in an enclosed system or use of an equipment proven to be equally effective. Condition 7 of the requirements for permit unit N-2274-1-2 assures compliance with this requirement.

Section 5.5 limits the use of coating application equipment to one of the listed methods. Condition 8 of the requirements for permit unit N-2274-1-2, condition 7 of the requirements for permit units N-2274-3-1 and N-2274-4-1, and condition 6 of the requirements for permit unit N-2274-2-1 assures compliance with this requirement.

Section 6.1 requires the display of maximum VOC content of the coating and statement of the manufacturer's recommendation regarding thinning of the coating. Condition 9 of the requirements for permit unit N-2274-1-2, condition 8 of the requirements for permit units N-2274-3-1 and N-2274-4-1, and condition 7 of the requirements for permit unit N-2274-2-1 assures compliance with this requirement.

Section 6.2 requires the permittee to maintain records of volume of coating and solvent used. Condition 10 of the requirements for permit unit N-2274-1-2, condition 9 of the requirements for permit units N-2274-3-1 and N-2274-4-1, and condition 8 of the requirements for permit unit N-2274-2-1 assures compliance with this requirement.

Section 6.2.3 requires all records be maintained and made available for inspection for the previous 24 month period. This requirement is extraneous and is not addressed since it has been superseded by the requirement of Section 9.5.2 of District Rule 2520. Condition 9 of the facility wide requirements (N-2274-0-1) already requires keeping of records at least five years.

Section 6.3 requires analysis of necessary data to determine compliance and enforcement of the limits be performed by appropriate test methods. Condition 11 of the requirements for permit unit N-2274-1-2, condition 10 of the requirements for permit units N-2274-3-1 and N-2274-4-1, and condition 9 of the requirements for permit unit N-2274-2-1 assures compliance with this requirement.

17. District Rule 4661

District Rule 4661, Organic Solvents, has been submitted to the EPA to replace each of the county rules in the SIP: 409 (Fresno, Merced, San Joaquin, Stanislaus) and 410 (Madera, Kern, Kings, Tulare). Attachment D lists all of the applicable requirements of District Rule 4661 and shows which are included in the rule from each county. This table shows that District Rule 4661 at least as stringent as each of the county rules.

Rule 4661, section 4.2, exempts any operation in full compliance with the provisions of District Rule 4603, Surface Coating of Metal Parts and Products, a Regulation IV rule. Units 2274-1-2, -2-1, -3-1, and -4-1 are in full compliance with District Rule 4603 and are therefore exempt from District Rule 4661.

X. PERMIT CONDITIONS

(see proposed permit, beginning on the next page)

ATTACHMENT A

EQUIPMENT LISTING

ATTACHMENT B

LISTING OF EXEMPT EQUIPMENT

The following exempt equipment was identified by the applicant on TVFORM-003, Insignificant Activities

Exemption Category	Rule 2020 Citation
Natural gas or LPG-fired boilers or other indirect heat transfer units of 5 MMBtu/hr or less.	5.1.1
Space heating equipment other than boilers.	5.1.4
Brazing, soldering, or welding equipment.	5.10.1
Containers with a capacity ≤ 250 gallons used to store organic material where the actual storage temperature < 150 F.	5.7.4
Containers used to store refined lubricating oils.	5.7.8
Unvented pressure vessels used exclusively to store liquefied gases or associated with exempt equipment.	5.7.9 or 5.10.4
Unheated, non-conveyorized degreasers $< 10 \text{ ft}^2$ open area; using solvents with initial boiling point ≥ 248 F; and < 25 gal/yr. evaporative losses.	5.9.2
Non-structural repairs & maintenance to permitted equipment.	4.2.6

ATTACHMENT C

EXISTING PERMITS TO OPERATE AND AUTHORITIES TO CONSTRUCT

ATTACHMENT D

COUNTY RULE / DISTRICT RULE 4661 COMPARISON

Comparison of District Rule 4661, Organic Solvents, with County Rules

Requirement	SJVU APCD Rule 4661	County Rule 409 (San Joaquin, Stanislaus, Merced, Fresno)	County Rules 409 (Stanislaus, Fresno) and 410 (Kings, Kern, Tulare)	County Rule 409.2 (Fresno, Merced, San Joaquin, Stanislaus, Madera)	Madera County Rule 410	County Rule 410.2 (Tulare, Kern) 404.1 (Kings)
1. Solvents subjected to heat shall not be emitted in quantities exceeding 15 pounds per day unless the emissions are reduced by 85 %.	5.1	X	X		X	
2. Photochemically reactive solvents shall not be emitted in quantities exceeding 40 pounds per day unless the emissions are reduced by 85 %.	5.2	X	X		X	
3. Nonphotochemically reactive solvents shall not be emitted in quantities exceeding 3000 pounds per day unless the emissions are reduced by 85 %.	5.3	X	X		X	
4. Web, strip, or wire continuous processes that emit organic materials shall be collectively subject to compliance with process requirements for situations 1, 2, or 3, as appropriate.	5.1, 5.2, 5.3	X	X		X (except situation 3 only)	
5. Emissions of organic materials to the atmosphere from cleanup activities with photochemically reactive solvents shall be included with other emissions.	5.4	X	X			
6. Emissions of organic materials to the atmosphere as a result of spontaneous drying of products for the first 12 hours after their removal from any source operation shall be include with other emissions of organic materials from that source for situations 1, 2 and 3 above.	5.5	X	X (except situation 1 only)		X	
7. Reduction of emissions shall be by incineration, adsorption, or by processing in a manner determined by the APCO to be not less effective than the previously mentioned methods.	5.6	X	X			
8. A person using air pollution control equipment shall monitor operating conditions necessary to determine the degree and effectiveness of that equipment.	5.7	X	X			
9. Any person using organic solvents shall supply the APCO with written evidence of the chemical composition , physical properties, and amount consumed of each organic solvent used.	5.8	X	X			
10. A person shall not dispose of more than one 1.5 gallons of any photochemically reactive solvent or material containing 1.5 gal of such solvent by any means which will permit the evaporation of such solvent into the atmosphere.	5.9.5	X	X	X		X

ATTACHMENT E

VAC-U-COATER PROCESS DIAGRAM

ATTACHMENT F

EPA COMMENTS / DISTRICT RESPONSE

EPA COMMENTS / DISTRICT RESPONSE

The EPA's comment regarding the proposed Title V Operating Permit for the VP Buildings, Inc. metal parts coating facility (District facility #N-2274) is encapsulated below followed by the District's response. A copy of the EPA's 9/19/97 letter is available at the District.

Objections Issues:

1. **EPA OBJECTION**

The Title V permit for Varco Pruden must ensure compliance with all emission limits from the August 27, 1991 Authority to Construct for the Vac-U-Paint coater. The 240 g/l limit on the VOC coating, the 16 hour per day operational limit, and the 66.5 gallon per day coating limit should be added to the Title V permit. The daily use limit of 66.5 gallons per day, along with the 240 g/l VOC content limit, limits emissions to 133.2 lbs VOC/day. Therefore, the proposed Title V permit limit of 139.00 lbs VOC/day must be lowered to 133.2 lbs VOC/day. In addition, the permit analysis must demonstrate that the Title V permit limit in lbs VOC/day is as stringent as original ATC limit expressed in lbs ROG/day.

DISTRICT RESPONSE

The 1991 ATC for this unit was implemented and a PTO issued prior to District unification in 1992. Upon District unification all permits were reissued. At this time The 240 g/l VOC coating limit, the 16 hour per day operational limit, and the 66.5 gallon per day coating limit were not included in the unified District permits. The District agrees that the 240 g/l VOC coating limit was removed without valid justification and this requirement will be included in the proposed Title V permit. However the District maintains the earlier decision to remove the operational limit and gallon usage limit was correct since these conditions are extraneous. The permit DEL is enforceable without the inclusion of these conditions. The District legal counsel cites section 42301(e) of the Health and Safety Code as the source of authority for the District to make such revisions to a permit. Unless there is compelling reason to add these conditions to the permit to ensure compliance with applicable rules, the District has no authority to do so.

Regarding EPA's request to change the current permit DEL from 139.0 lb VOC per day to 133.2 lb, the District has reviewed the engineering evaluation for this permit. The intent of the gallon usage limit (and the hourly operational limit) was to maintain VOC emissions below 140 lb/day. The 139 lb VOC per day limit with recordkeeping does this.

The District will clarify in the engineering evaluation that the terms volatile organic compound (VOC) and reactive organic compound (ROG) were used interchangeably by Stanislaus county engineers. In all cases, VOC was the intended terminology, according to Fred Cruz. Mr. Cruz is a current District engineer who also worked for Stanislaus County and prepared the evaluation for the ATC EPA references.

2. **EPA OBJECTION**

The Title V permit and the original authority to construct permit for the two dip tank units do not contain or reference any New Source Review requirements. The Stanislaus State Implementation Plan (New Source Review Rule 209.1) includes Lowest Achievable Emission Rate (LAER) and offset requirements. We believe that because this equipment is a major modification, the source should have applied LAER and obtained offsets. Therefore, the Title V permit must ensure compliance with all applicable NSR requirements. If additional controls and/or the purchase of offsets are required to comply with NSR, the permit must also contain a compliance schedule for meeting these requirements.

DISTRICT RESPONSE

The Stanislaus County engineering evaluation for these permit units states these two tanks were replacement units for large underground dip tank and some spray coat operations which were then used to coat pieces too large or awkward to coat in the old original tank. The evaluation also states there was no increase in VOC emissions and that county Rule 209.1, New Source Review, was not applicable to this modification.

3. EPA OBJECTION.

The requirements for the beam coating operation, permit unit N-2274-1-2, must contain enforceable conditions to ensure compliance with the daily emission limit of 145.2 lbs PM10/day, SIP Rule 404 (0.1 grain PM/dscf), and SIP Rule 405 (PM emission rate based on process throughput).

DISTRICT RESPONSE

PM10 emission rates are dependent on the solids content of the coating and the transfer efficiency of the coating method. The engineering evaluation ATC N-2274-1-1, dated 8/21/96, states transfer efficiency for their proposed HVLP spray gun is 75% and the PM10 fraction is 96% (from the ARB Speciation Manual, Second Edition, Volume 2). The District will add the requirement to use HVLP spray gun for coating application and recordkeeping requirements to assure compliance with the PM10 NSR limit. The District will show compliance with District Rule 4201, grain loading. District Rule 4202 is not applicable to this type of source operation, as discussed with EPA on 10/30/97.

4. EPA OBJECTION.

The District has not included any frequency for opacity monitoring for the spray coating operations to determine compliance with facility-wide 20% opacity limit (condition 22). We suggest daily monitoring, or at a minimum, weekly.

DISTRICT RESPONSE

The District will add to following conditions to permit units N-2274-1-2 and N-2274-2-1 to assure compliance with the facility-wide opacity limit of 20%:

For permit unit N-2274-1-2:

- The permittee shall inspect spray building exhaust stacks weekly for excess visible emissions. The inspection shall include verifying the HVLP spray gun(s) and spray building filter/exhaust equipment are performing normal, designed functions and are being operated according to standard procedures, and per the manufacturer's recommendations. If the equipment is not performing according to design and procedures or if excessive visible emissions are observed from the building exhaust stack, the permittee shall take corrective within 24 hours. If excessive visible emissions cannot be corrected within 24 hours, EPA Method 9, except for data reduction (section 2.5), shall be conducted to determine compliance with 20% facility-wide opacity limit. [District Rule 2520, 9.4.2] - Federally Enforceable Through Title V Permit

- The permittee shall maintain the following records with regards to spray building exhaust and equipment inspections: 1) date and time of inspection, 2) stack or emission point identification 3) operational status/conditions of spray gun/filter equipment, 4) observed results and conclusions, 5) description of corrective actions taken to resolve any observed excess opacity, 6) date and time opacity problem was resolved, 7) date of Method 9 test and results if conducted, and 8) name of person(s) performing the inspection. [District Rule 2520, 9.4.2] - Federally Enforceable Through Title V Permit

For permit unit N-2274-2-1:

- The permittee shall inspect the Vac-U-Paint unit monthly for excess visible emissions. The inspection shall include verifying the equipment is performing normal, designed functions and is being operated according to standard procedures and per the manufacturer's recommendations. If the equipment is not performing according to design and procedures or if excessive visible emissions are observed from unit's exhaust stack, the permittee shall take corrective within 24 hours. If excessive visible emissions cannot be corrected within 24 hours, EPA Method 9, except for data reduction (section 2.5), shall be conducted to determine compliance with 20% facility-wide opacity limit. [District Rule 2520, 9.4.2] - Federally Enforceable Through Title V Permit.

- The permittee shall maintain the following records with regards to Vac-U-Paint unit inspections: 1) date and time of inspection, 2) stack or emission point identification 3) operational status/conditions of unit, 4) observed results and conclusions, 5) description of corrective actions taken to resolve any observed excess opacity, 6) date and time opacity problem was resolved, 7) date of Method 9 test and results if conducted, and 8) name of person(s) performing the inspection. [District Rule 2520, 9.4.2] - Federally Enforceable Through Title V Permit.

General Comments:

5. EPA COMMENT

NSR Applicability to Beam Coating Operation. We understand that this unit was subject to NSR in 1996 due to a modification that did not increase emissions and did not trigger BACT. We recommend that the District revise the final permit analysis to explain this distinction.

DISTRICT RESPONSE

The conditions resulting from ATC N-2274-1-1, issued in 1996, are addressed in the Title V engineering evaluation. The District does not feel it is necessary to include the additional background information in the Title V engineering evaluation. However, the engineering evaluation for the referenced ATC will be provided to EPA upon request.

6. EPA COMMENT

We suggest that the District identify whether they are using the template conditions, or any differences, to assist our review of your permits. In addition, we suggest correcting a typographical error in condition number 8, which lists two items as item #5.

DISTRICT RESPONSE

Unless the applicant specifically requests to use a District template and qualifies for that use, the District will not identify whether we are using the template conditions in proposed permits. The District has already discussed with EPA the general guidelines being followed with regards to Title V permitting and template conditions. The District will correct the typographical error in condition 8 of the facility-wide conditions (N-2274-0-1)

7. **EPA COMMENT**

The sample paint log, supplied by the applicant in their Title V application, shows the same VOC emissions for each day, except that it contains two entries dated 9/19/96 for permit unit N-2274-2-0. We recommend that the District determine whether this was a bookkeeping error or an emission exceedance and whether any additional compliance requirements are necessary. In addition, we suggest requiring a signature for each entry into the coating usage log for the 2600 gallon dip tank.

DISTRICT RESPONSE

The source phoned the District after receiving a copy of EPA's comments, dated 9/19/97. They stated two entries dated 9/19/96 was a typographical error. They have also since required that log entries be initialed by the person making the entry for the dip tanks. This requirement will be added to the dip tank requirements, permit units N-2274-3-1 and -4-1, pursuant to VP Building's, Inc. request.

8. **EPA COMMENT**

The final Title V permit must ensure compliance with Rule 409 unless the District's revised permit analysis demonstrates that this requirement does not apply. Since similar controls may also be required by LAER, the District need not conduct a Rule 409 applicability determination if LAER requirements or other SIP requirements are as stringent or more stringent than Rule 409.

DISTRICT RESPONSE

District Rule 4661, Organic Solvents, has been submitted to the EPA to replace each of the county rules in the SIP: 409 (Fresno, Merced, San Joaquin, Stanislaus) and 410 (Madera, Kern, Kings, Tulare). EPA has committed to expedite SIP approval of this rule. Attachment D has been included in the Title V evaluation which lists all of the applicable requirements of District Rule 4661 and shows which are included in the rule from each county. This table shows District Rule 4661 is at least as stringent as each of the county rules.

Rule 4661, section 4.2, exempts any operation in full compliance with the provisions of District Rule 4603, Surface Coating of Metal Parts and Products, a Regulation IV rule. Units 2274-1-2, -2-1, -3-1, and -4-1 are in full compliance with District Rule 4603 and are therefore exempt from District Rule 4661.

ATTACHMENT G

PUBLIC COMMENTS / DISTRICT RESPONSE

PUBLIC COMMENT / DISTRICT RESPONSE

Public comments were received from VP Buildings, Inc. regarding the proposed Title V Operating Permit for their metal fabrication and coating facility (District facility #N-2274). These comments are encapsulated below followed by the District's response. A copy of the VP Buildings, Inc. 9/3/97 letter is available at the District.

General Comments:

1. ***VP BUILDING, INC. COMMENT***

The facility name is requested to be revised to "VP Buildings, Inc." in accordance with the Certification of Transfer of Ownership submitted in June, 1997.

DISTRICT RESPONSE

References to Varco Pruden Buildings in the District engineering evaluation for your proposed Title V permit were made according to your Title V application submittal, received October 1996. No subsequent request to modify your Title V application has been received in this office until now. The District acknowledges your request and will change all references to the facility name in the Title V evaluation and resulting permit to "VP Buildings, Inc.".

2. ***VP BUILDING, INC. COMMENT***

The responsible official is requested to be revised to "William Reynolds, Vice President Manufacturing".

DISTRICT RESPONSE

The District acknowledges your request and will change all references to the responsible official as being "William Reynolds, Vice President Manufacturing in the Title V evaluation". Please also see District Response to VP Building, Inc. comment 1.

3. ***VP BUILDING, INC. COMMENT***

Any "pounds per day" limitations included in the permit are requested to be converted to "tons per month, based on the monthly average of each period of 12 consecutive months".

DISTRICT RESPONSE

District Rule 2201, New and Modified Stationary Source Review, sections 3.14 and 5.1.9.2 require that a Permit to Operate contain a Daily Emissions Limitation (DEL) which is enforceable on a daily basis. Your request to convert all DELs to "tons per month, based on the monthly average of each period of 12 consecutive months" is in violation of this rule and is denied.

4. ***VP BUILDING, INC. COMMENT***

A permit shield is requested to be included in the final permit.

DISTRICT RESPONSE

The District discussed this comment on 11/5/97 with Steve Wareing, Manufacturing Engineer for VP Buildings, Inc. During the discussion, VP Buildings decided to withdraw its request for a permit shield, with the understanding that, in their specific situation, a permit shield would not result in any additional real compliance benefit to them in their Title V permit.

Condition Specific Comments:

5. VP BUILDING, INC. COMMENT

Permit condition B.12, for permit unit N-2274-1-2, contains a “pounds per day” VOC limitation which originates from District Rule 2201, section 3.14, requirements. District Rule 2201 is not part of the State Implementation Plan (SIP). Therefore this “pounds per day” limitation should be changed from a federally enforceable requirement to a District only enforceable requirement.

DISTRICT RESPONSE

As clarified in instructions which accompanied District Title V application forms, federally enforceable conditions include any term or condition of any preconstruction permit issued pursuant to regulations approved or promulgated through rulemaking under Title I, including parts C or D, of the Federal Clean Air Act (CAA). This includes any term or condition of any Authority to Construct permit issued through District Rule 2201. Therefore the permit condition you reference is federally enforceable and not a District only requirement.

6. VP BUILDING, INC. COMMENT

Permit condition B.13, for permit unit N-2274-1-2, contains a “pounds per day” PM10 limitation which originates from District Rule 2201, section 3.14, requirements. District Rule 2201 is not part of the State Implementation Plan (SIP). Therefore this “pounds per day” limitation should be changed from a federally enforceable requirement to a District only enforceable requirement.

DISTRICT RESPONSE

Please refer to District Response to VP Building, Inc. comment 5.

7. VP BUILDING, INC. COMMENT

Permit condition C.11, for permit unit N-2274-2-1, contains a “pounds per day” VOC limitation which originates from District Rule 2201, section 3.14, requirements. District Rule 2201 is not part of the State Implementation Plan (SIP). Therefore this “pounds per day” limitation should be changed from a federally enforceable requirement to a District only enforceable requirement.

DISTRICT RESPONSE

Please refer to District Response to VP Building, Inc. comment 5.